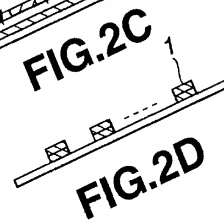
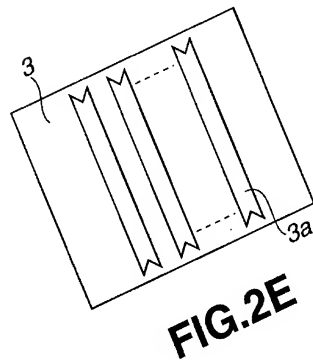
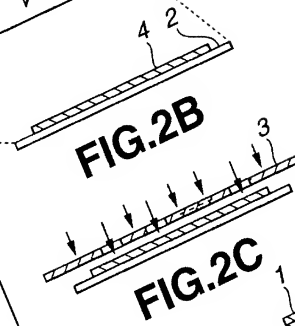
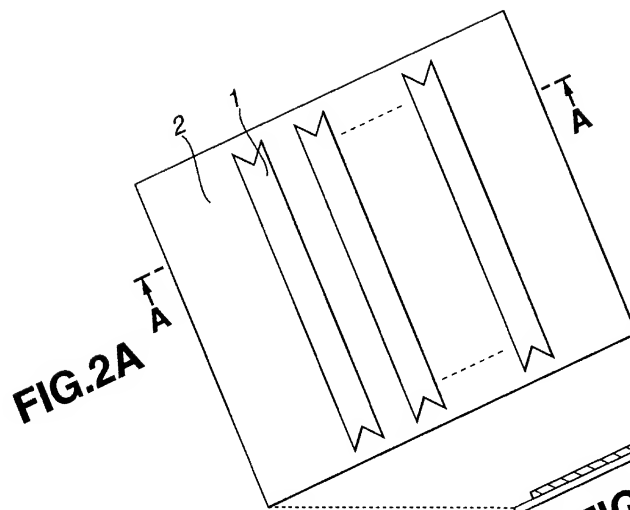
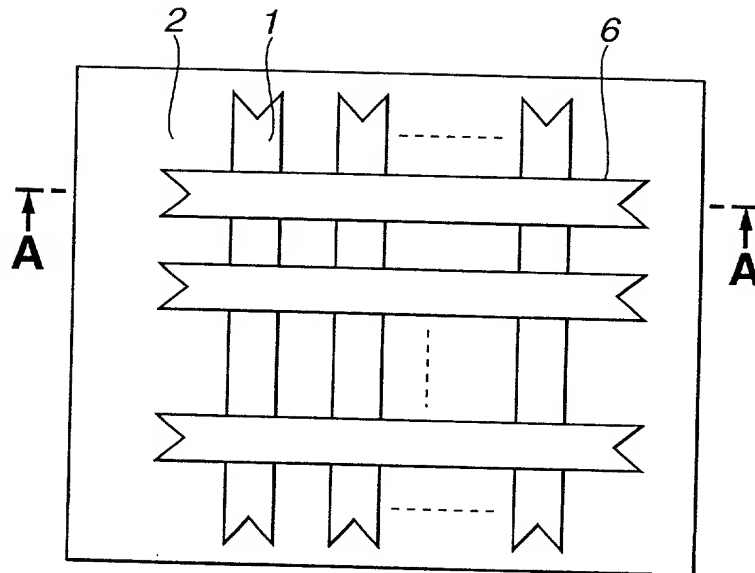
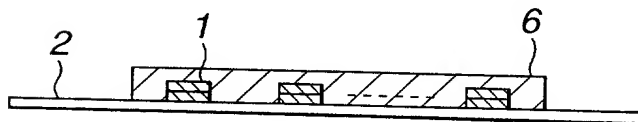


FIG.1





**FIG. 3A**



**FIG. 3B**

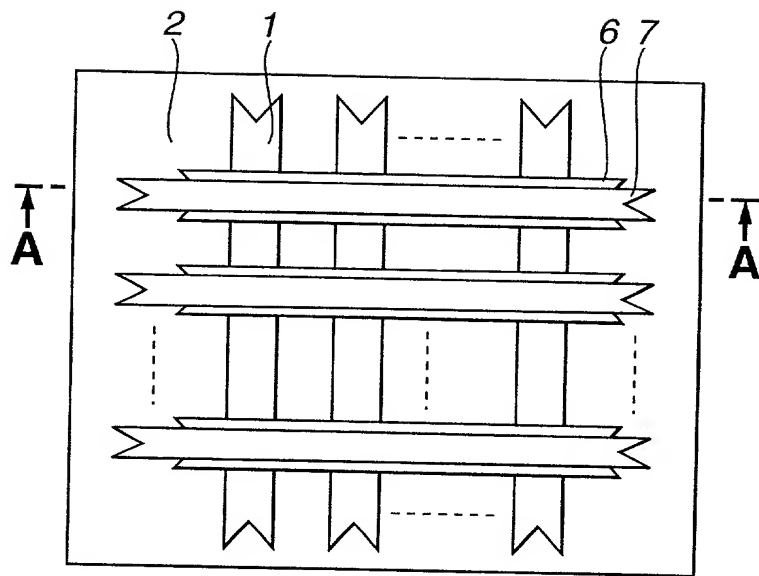
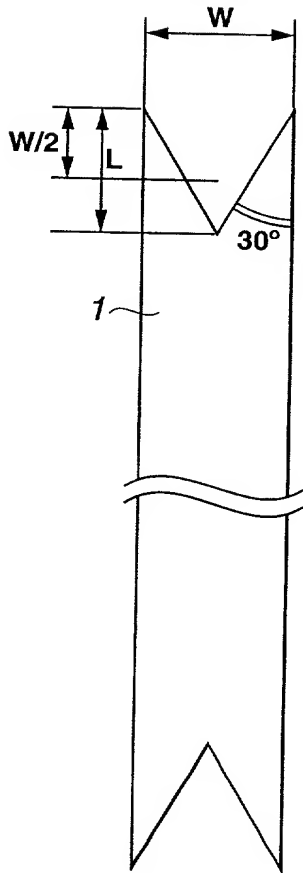
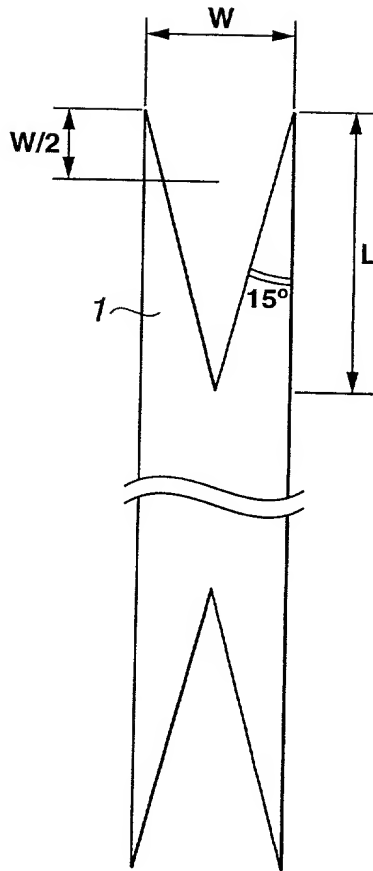


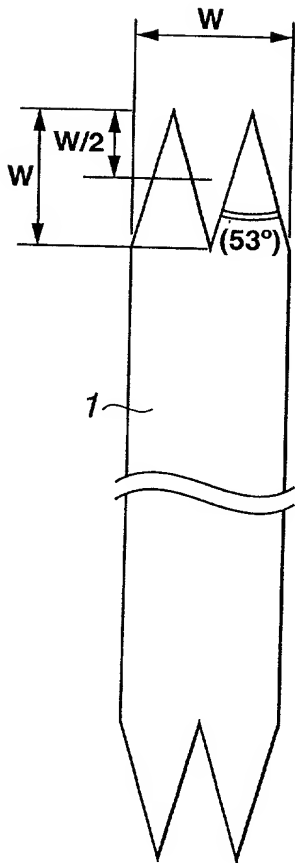
FIG.4



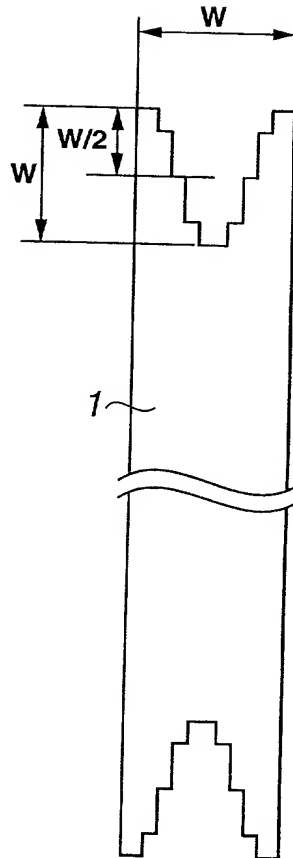
**FIG. 5A**



**FIG. 5B**



**FIG. 6A**



**FIG. 6B**

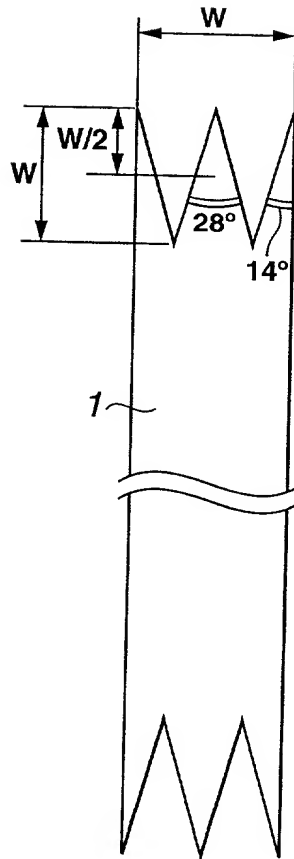


FIG.7

LONGITUDINAL  
DIRECTION

LATERAL  
DIRECTION

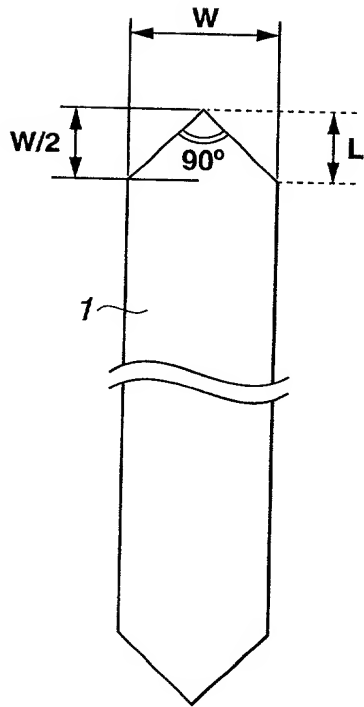


FIG. 8A

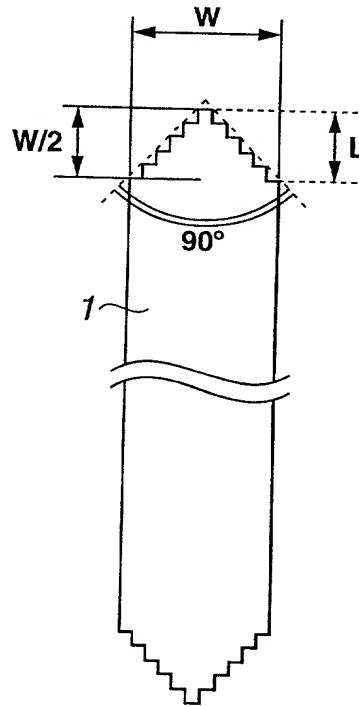
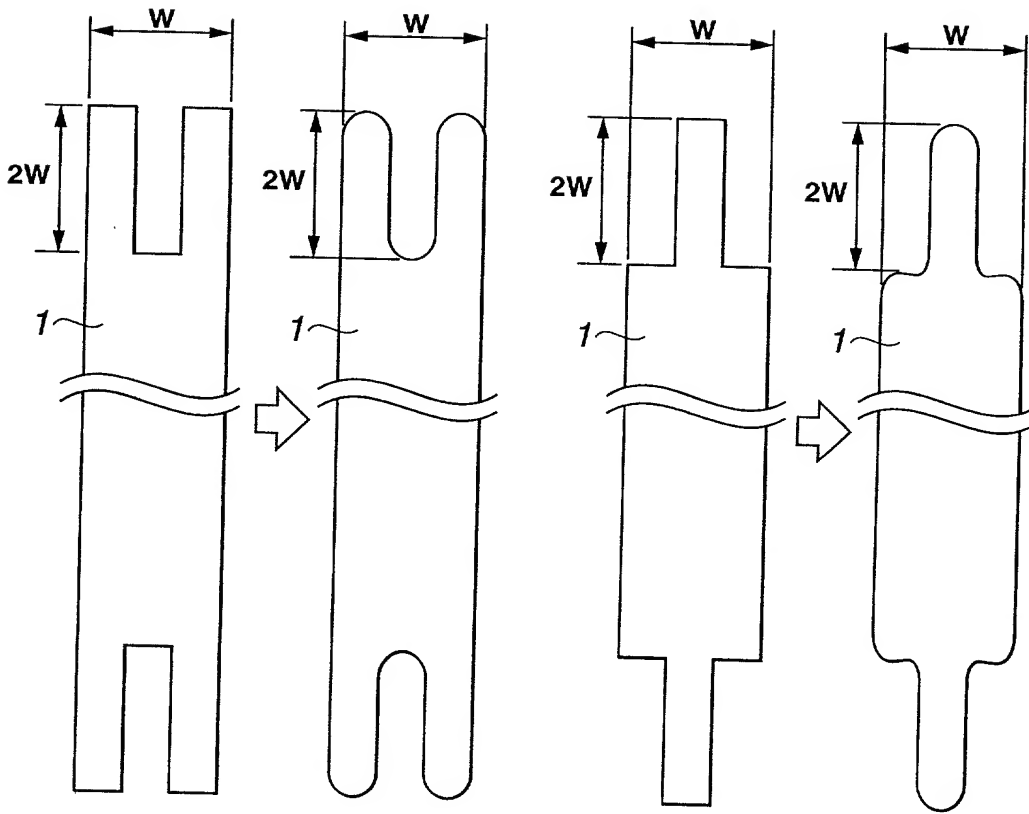


FIG. 8B

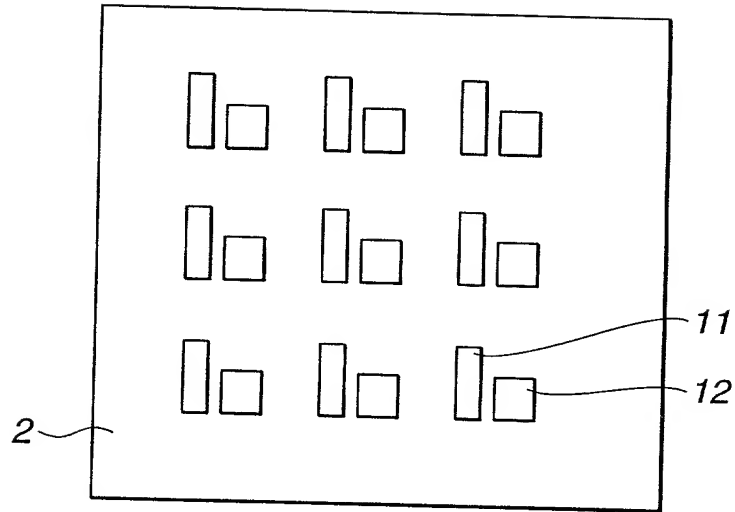




**FIG.9A** **FIG.9B** **FIG.9C** **FIG.9D**



**FIG.11A**



**FIG.11B**

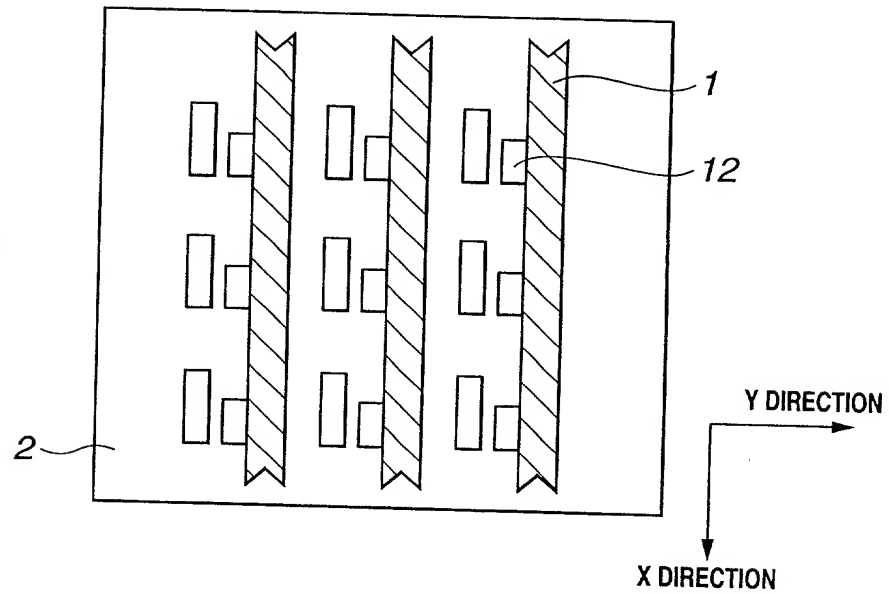


FIG.12A

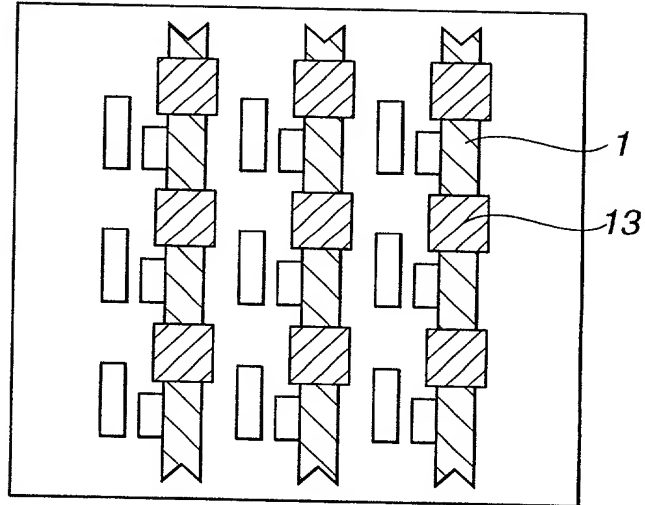
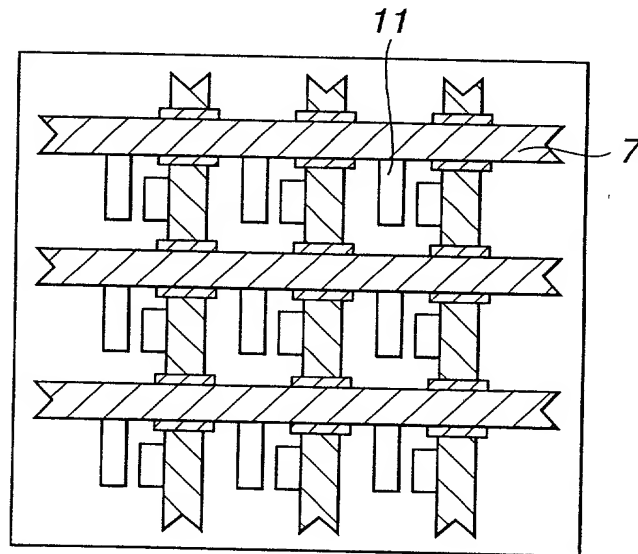
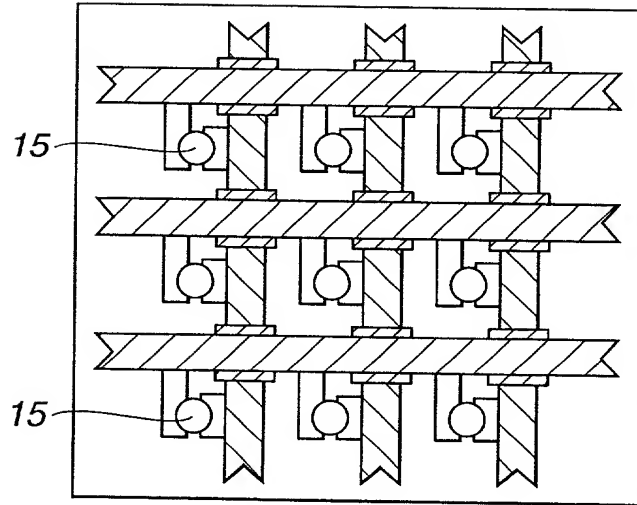


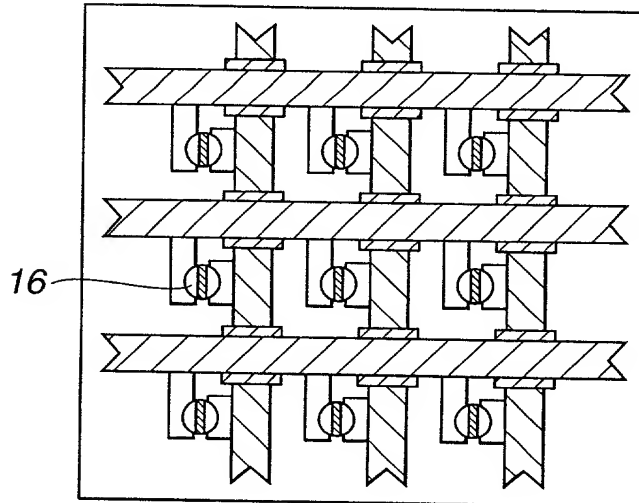
FIG.12B

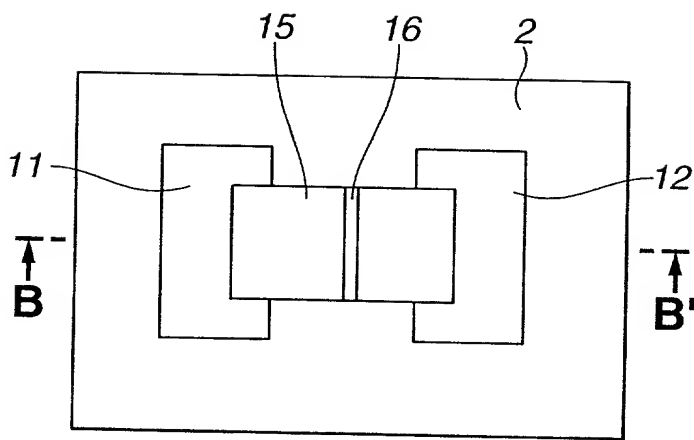


**FIG.13A**

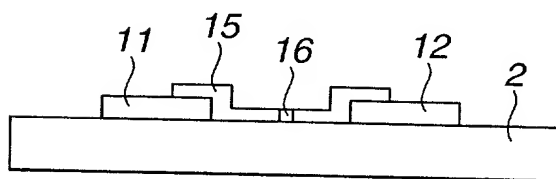


**FIG.13B**





**FIG. 14A**



**FIG. 14B**

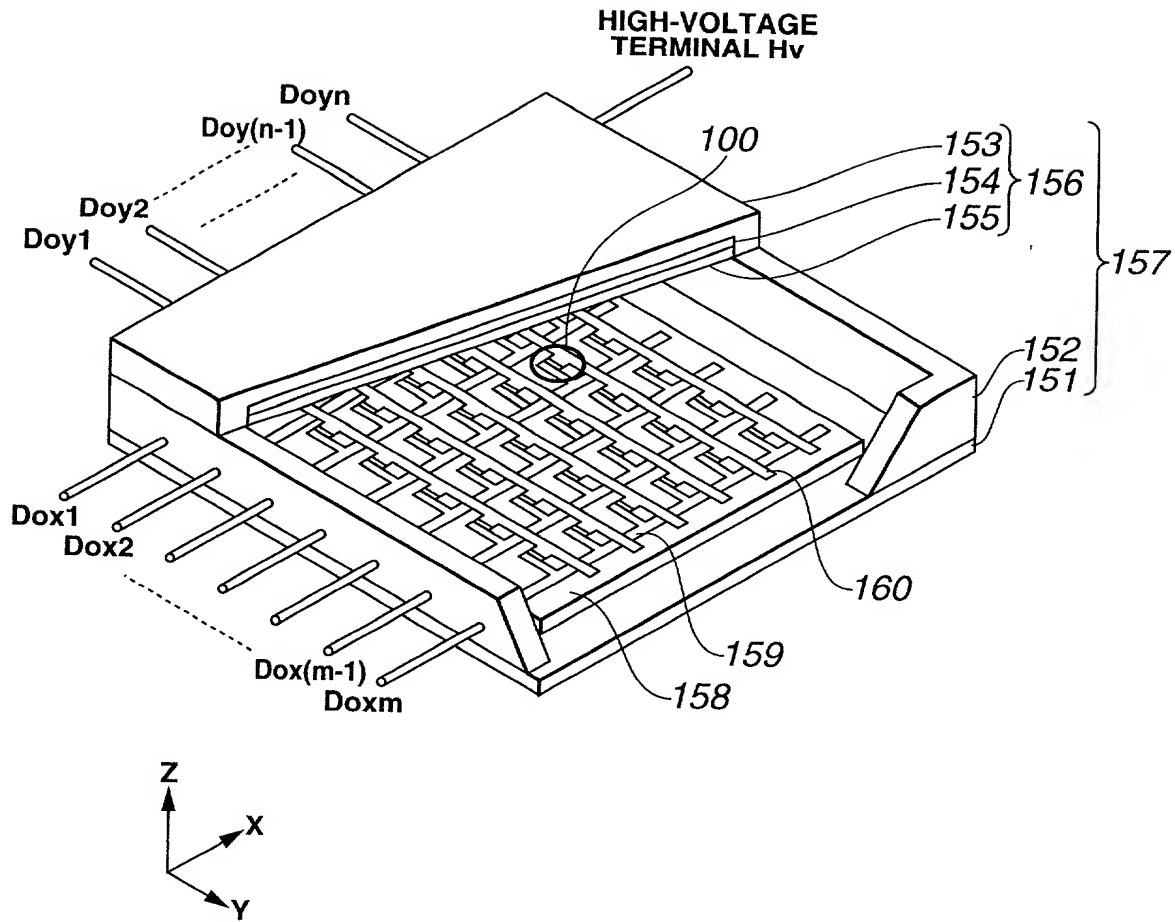


FIG.15

FIG.16A

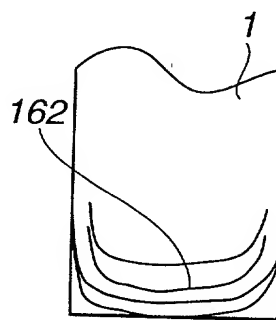
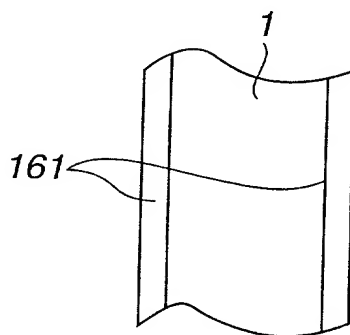
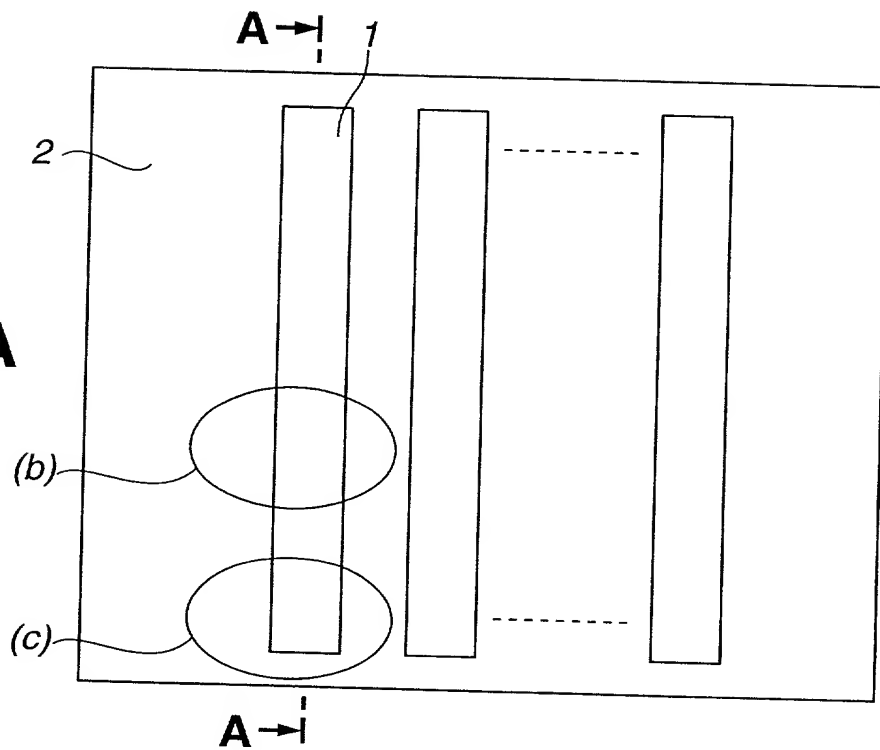


FIG.16B FIG.16C

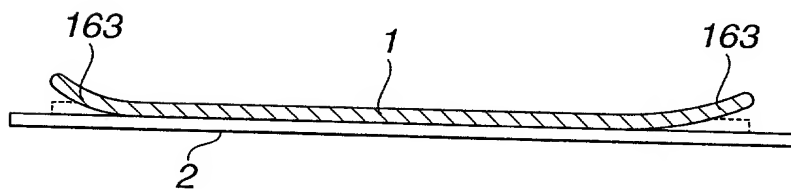


FIG.16D



FIG.17A

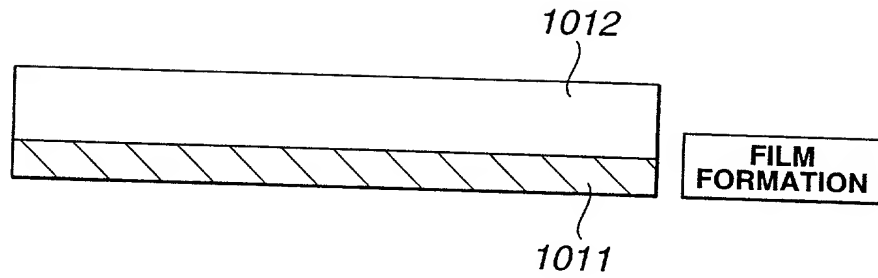


FIG.17B

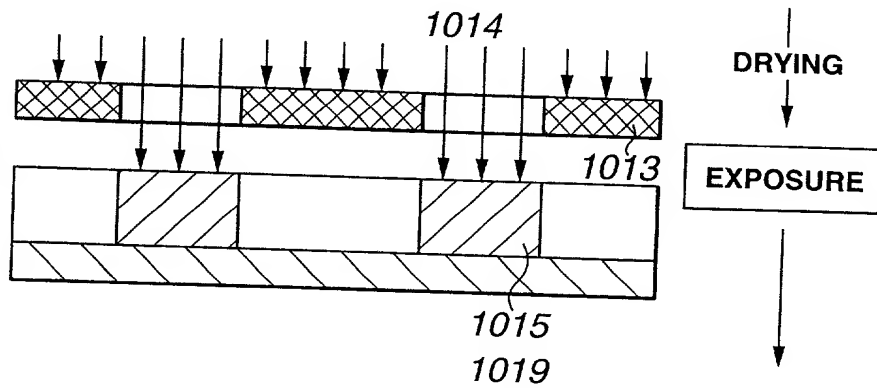


FIG.17C

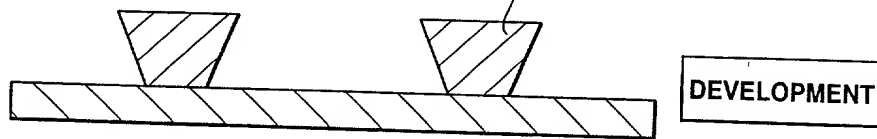


FIG.17D

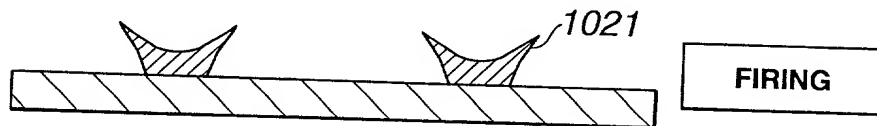


FIG. 17A is a cross-sectional view of a substrate 1011 with a thin film layer 1012. FIG. 17B is a cross-sectional view of a substrate 1015 with a patterned layer 1013 and a layer 1014. FIG. 17C is a cross-sectional view of a substrate 1019 with a patterned layer 1021. FIG. 17D is a cross-sectional view of a substrate 1021 with a patterned layer 1021.

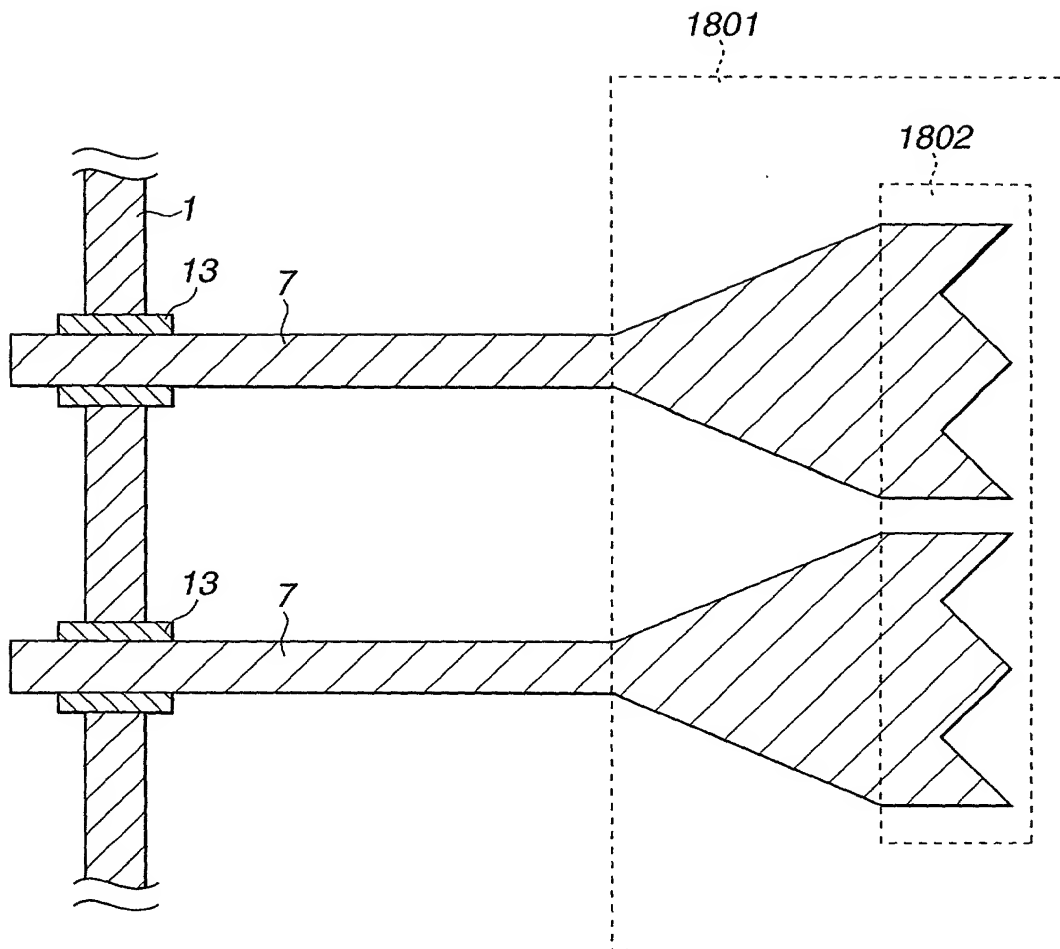


FIG.18